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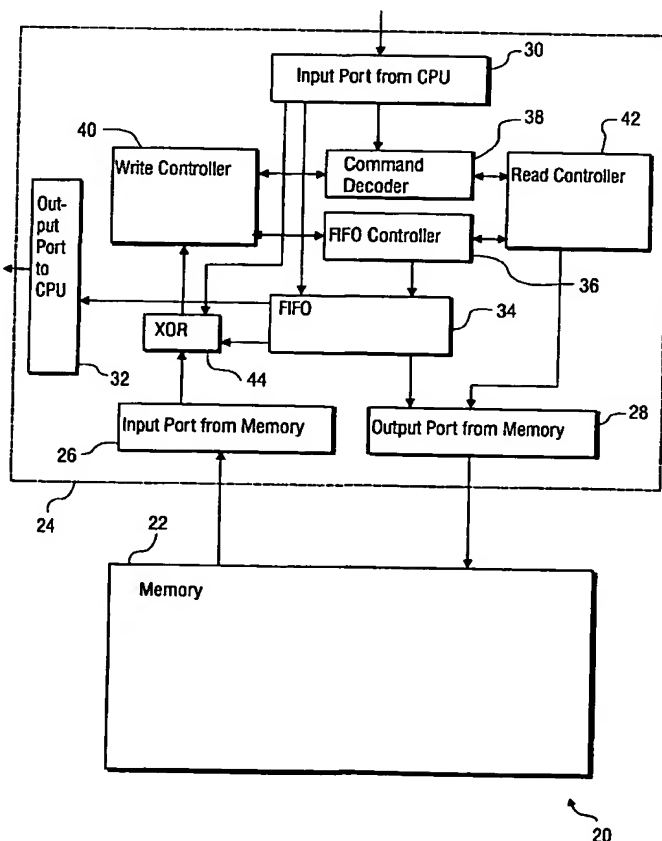
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[Continued on next page]

(54) Title: MEMORY CONTROLLER AND METHOD FOR WRITING TO A MEMORY



(57) Abstract: The invention provides a controller for a memory having at least one memory cell, that involves a higher cost for writing than for reading. The memory cell is allocated to a first address information and adapted to store memory data. The memory controller of the invention comprises a register. A write controller connected with said register and said memory is adapted to receive a write request comprising said first address information and first write data allocated thereto, ascertain whether said first address information is stored in said register. If yes, the write controller compares said first write data with second write data of an earlier write request in said register allocated to said first address information. If no, it compares said first write data with said memory data allocated to the first address information. The write controller further forwards said first address information and said first write data to said register, respectively, and initiates a write operation of said first or second write data, respectively, from said register to said memory, if the first or second write data, respectively, is different from said memory data. With the memory controller of the invention write power can be saved while providing continuous access to the memory.

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SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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| Y | US 6 151 658 A (MAGRO) 21 November 2000 (2000-11-21) column 2, line 20 - column 3, line 2 column 4, line 3 - column 5, line 44; figures 1,2 ----- -/- | 1-3, 9-11, 14-19, 24,26 |

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☒ Patent family members are listed in annex.

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